FIG. 1
(PRIOR ART)

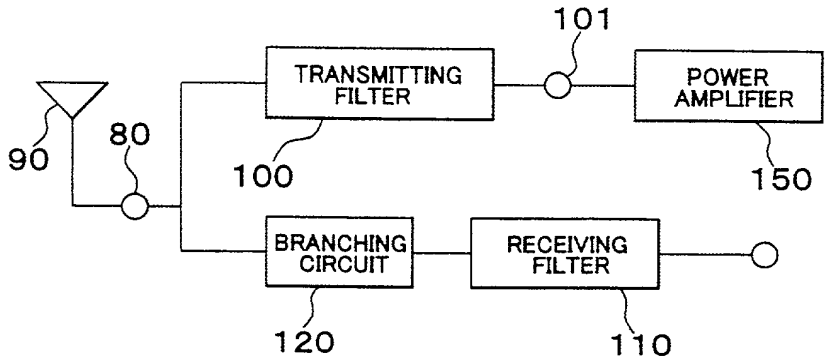

FIG. 2
(1st EMBODIMENT)

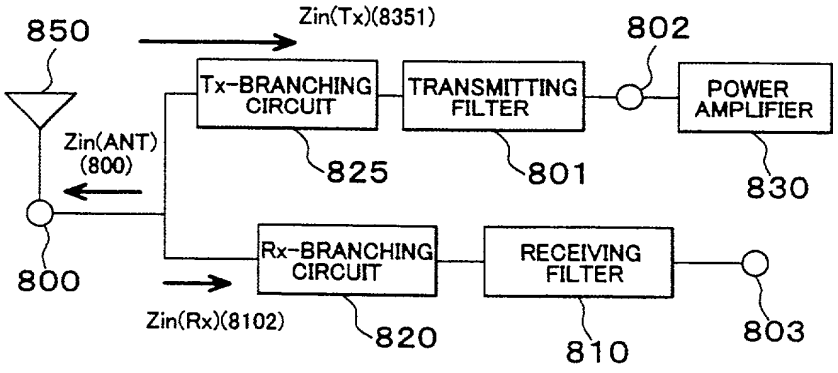

FIG. 3

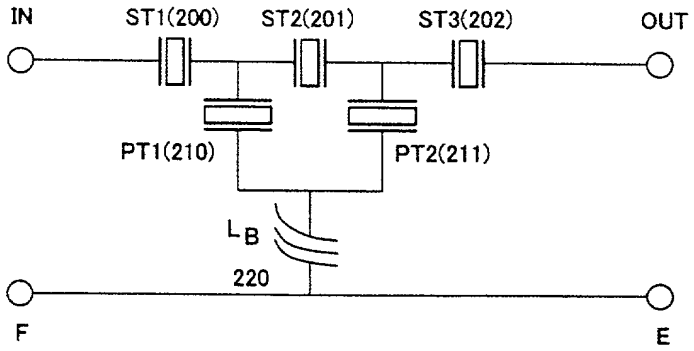
IN
ST1(200)
ST2(201)
ST3(202)
OUT
PT1(210)
PT2(211)
L_B
220
F
E

FIG. 4

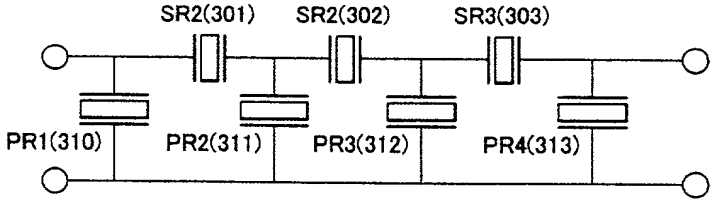
SR2(301)
SR2(302)
SR3(303)
PR1(310)
PR2(311)
PR3(312)
PR4(313)

FIG. 5

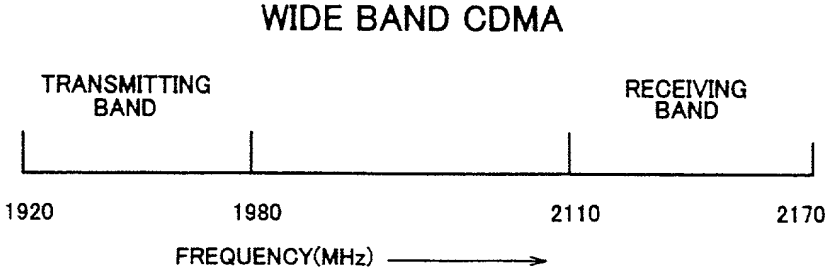
WIDE BAND CDMA
TRANSMITTING BAND
RECEIVING BAND
1920
1980
2110
2170
FREQUENCY(MHz)

FIG. 6

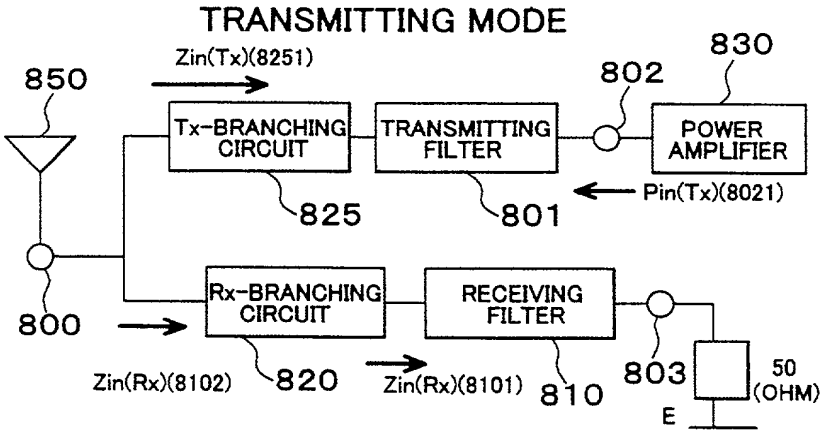
TRANSMITTING MODE
850
Zin(Tx)(8251)
802
830
Tx-BRANCHING CIRCUIT
TRANSMITTING FILTER
POWER AMPLIFIER
825
801
Pin(Tx)(8021)
800
Rx-BRANCHING CIRCUIT
RECEIVING FILTER
Zin(Rx)(8102)
820
Zin(Rx)(8101)
810
803
50 (OHM)
E

FIG. 7

RECEIVING MODE

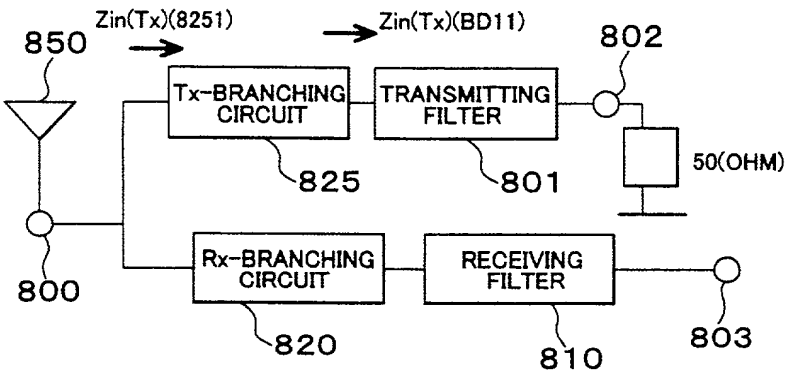

FIG. 8

CONSTRUCTION OF TRANSMITTING FILTER

	IDT(S0)	IDT(S1)	IDT(S2)	IDT(P0)	IDT(P1)
f00(MHz)	2216	2216	2216	2124	2124
LPR	0.55	0.55	0.55	0.55	0.55
CROSS LENGTH ω (um)	40	20	40	42	42
LOGARITHM	90	90	90	99	99
REFRECTOR					
f00(MHz)	2216	2216	2216	2124	2124
LPR	0.55	0.55	0.55	0.55	0.55
QUANTITY	80	80	80	80	80

POLARIZED L
0.65(nH)

FIG. 9

CONSTRUCTION OF RECEIVING FILTER

	IDT(S0)	IDT(S2)	IDT(S3)	IDT(P0)	IDT(P1)	IDT(P2)	IDT(P3)	POLARIZED L
f00(MHz)	2436	2436	2436	2340	2340	2340	2340	0.025(nH)
LPR	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
ω(um)	30	30	30	33	47	47	33	
LOGARITHM	80	80	80	70	99	99	70	
REFRECTOR								
f00(MHz)	2436	2436	2436	2340	2340	2340	2340	
LPR	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
QUANTITY	80	80	80	80	80	80	80	

FIG. 10

ATTENUATION CHARACTERISTIC OF THE DUPLEXER

			TRANSMITTING FILTER								RECEIVING FILTER						
	Tx-BRANCHING	Rx-BRANCHING	1880 (MHz)	1910	1920	1940	1980	2075	2110	2170	1880	1940	1980	2025	2050	2110	2170
PRIOR ART	0	5.65(mm)	12.8	12	15	1.63	1.4	60	51	61.5	43.8	46.1	55.2	36	33.3	3.10	2.80
1st EMBODIMENT	8.75(mm)	5.65(mm)	12.8	12	15	1.63	1.4	60	51	61.5	38.8	46	54.4	34.8	32.8	2.33	2.45
	STANDERD		30	12	7	2	2	40	45	45	50	50	50	41	26	3	3

FIG. 11

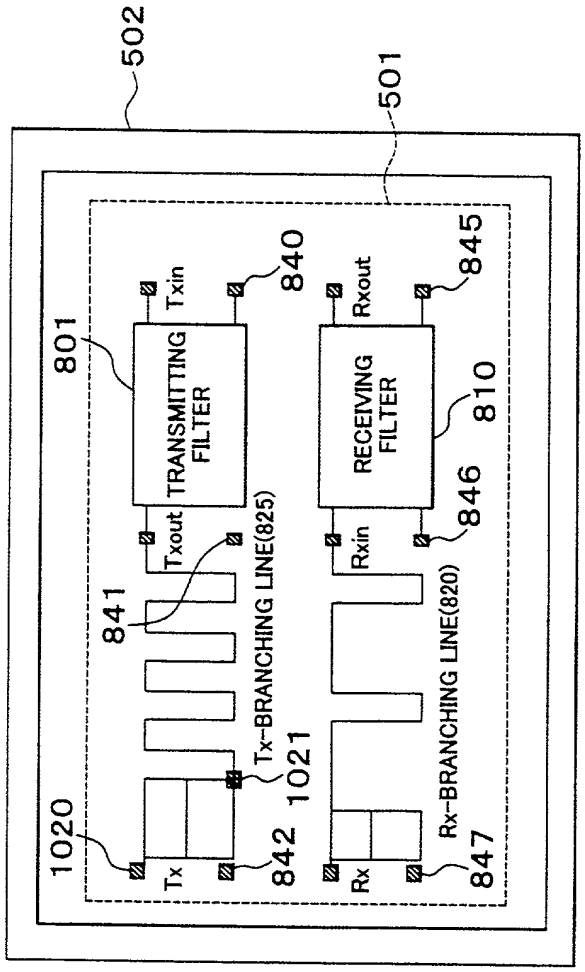
502
501
801
TRANSMITTING FILTER
Txin
840
Txout
841
Tx-BRANCHING LINE(825)
1021
1020
Tx
842
RECEIVING FILTER
Rxout
845
810
Rxin
846
Rx-BRANCHING LINE(820)
Rx
847

FIG. 12

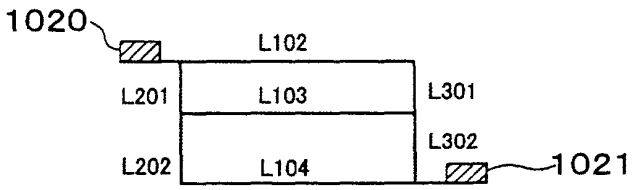

FIG. 13

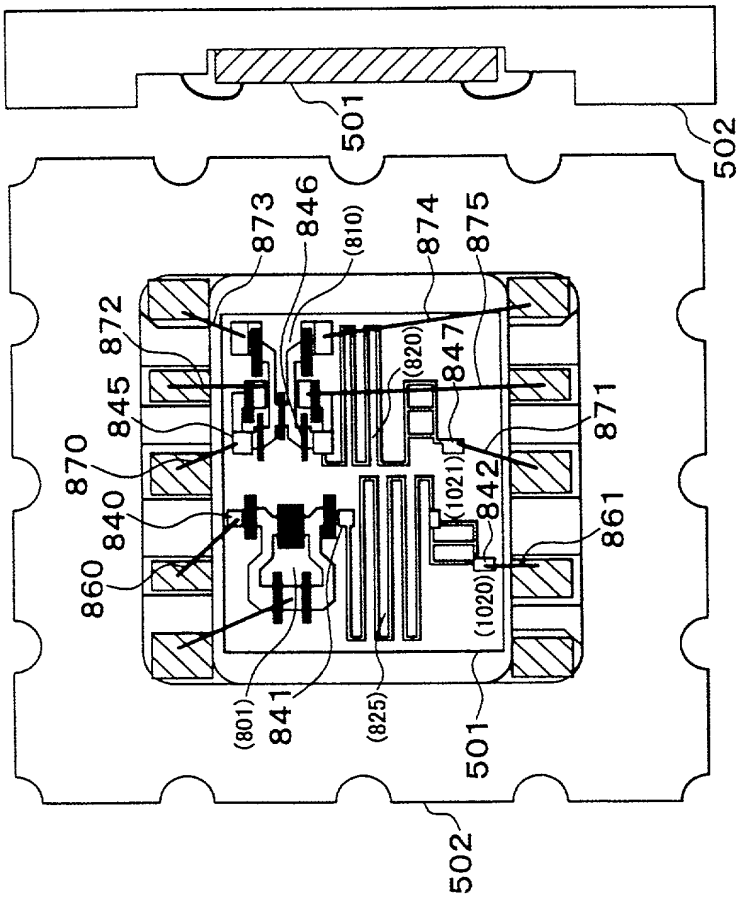
501
502
873
846
(810)
874
875
872
(820)
847
845
871
870
(1021)
842
840
861
860
(1020)
(801)
841
(825)
501
502

FIG. 14
(2nd EMBODIMENT)

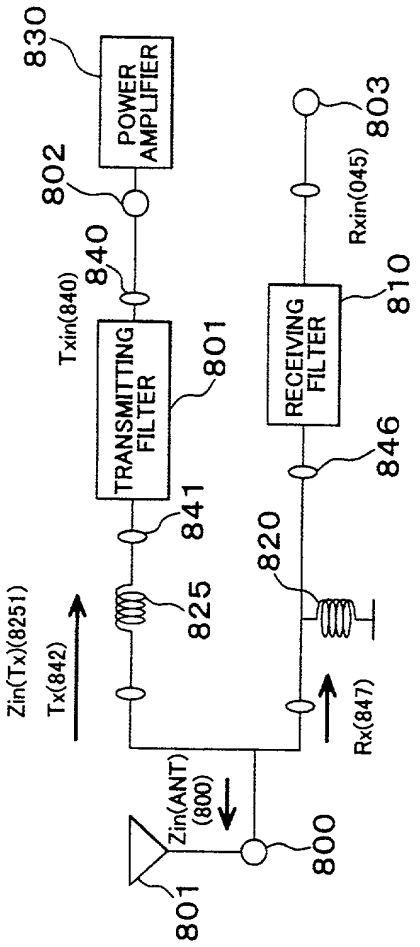

FIG. 15

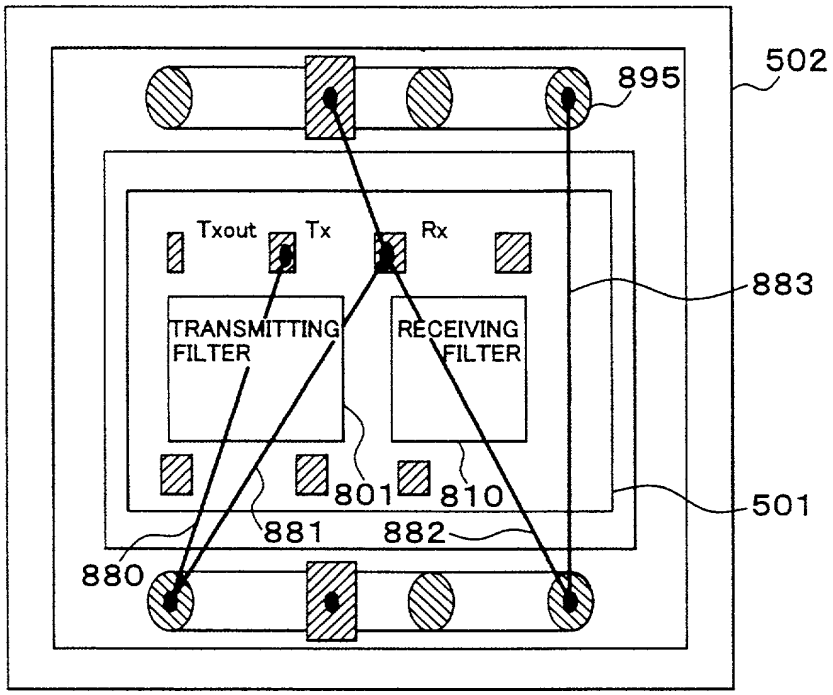
502
895
Txout
Tx
Rx
883
TRANSMITTING FILTER
RECEIVING FILTER
801
810
501
881
882
880

FIG. 16

ATTENUATION CHARACTERISTIC OF THE SAW DUPLEXER OF WIDE BAND CDMA

			TRANSMITTING FILTER								RECEIVING FILTER						
BAND	Tx-BRANCHING	Rx-BRANCHING	1880	1910	1920	1940	1980	2075	2110	2170	1880	1940	1980	2025	2050	2110	2170
PRIOR ART	0	5.65(mm)	12.8	12	15	1.63	1.4	60	51	61.5	43.8	46.1	55.2	36	33.3	3.68	3.29
1st EMBODIMENT	8.75(mm)	5.65(mm)	12.8	12	15	1.63	1.4	60	51	61.5	38.8	46	54.4	34.8	32.8	2.33	2.45
2st EMBODIMENT	3.2(nH) SERIAL	1.8(nH) PARALLEL	12.9	12	14.8	1.62	1.94	73.8	55.6	58.5	42.4	41.6	49.7	31	31.2	3.05	2.92
	STANDARD		30	12	7	2	2	40	45	45	50	50	50	41	26	3	3

FIG. 17

ATTENUATION CHARACTERISTIC OF THE SAW DUPLEXER

			TRANSMITTING FILTER								RECEIVING FILTER						
BAND	Tx-BRANCHING	Rx-BRANCHING	1880	1910	1920	1940	1980	2075	2110	2170	1880	1940	1980	2025	2050	2110	2170
PRIOR ART	0	5.65(mm)	12.8	12	15	1.63	1.4	60	51	61.5	43.8	46.1	55.2	36	33.3	3.10	2.80
2st EMBODIMENT	3.2(nH) SERIAL	1.8(nH) PARALLEL	12.9	12	14.8	1.62	1.94	73.8	55.6	58.5	42.4	41.6	49.7	31	31.2	3.05	2.78
	STANDARD		30	12	7	2	2	40	45	45	50	50	50	41	26	3	3

FIG. 18

SPECIFIC RESISTANCE

MATERIAL	SPECIFIC RESISTANCE	MATERIAL	SPECIFIC RESISTANCE
1(Au)	1.416	5(PLATINUM)	6.16
2(Al)	1.64	6(TUNGSTEN)	3.25
3(Cu)	1	7(TITANIUN)	47.8

FIG. 19

		SHAPE OF INDUCTOR(Unit:cm)									
NO	MATERIAL	H	W	LENGTH				INDUCT(nH)	SPECIFIC RESISTANCE	Q	RESISTANCE
1	Au	0.03	0.03	0.1	1.667	0.511	1.838	0.93369	1.416	48.66	0.117
2	Au	0.03	0.03	0.158	2.6333	0.9684	2.2462	1.80291	1.416	59.47	0.095722
3	Au	0.03	0.03	0.2395	3.9917	1.3844	2.6333	3.20388	1.416	69.719	0.08165

FIG. 20

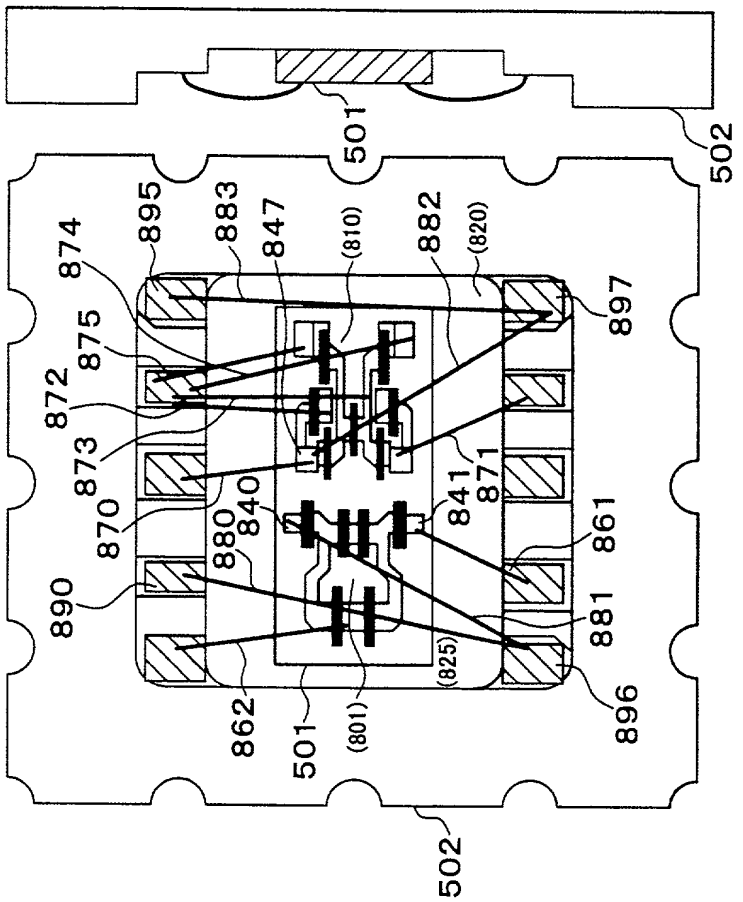
501
502
895
883
847
(810)
882
(820)
874
897
875
872
873
871
841
870
840
880
861
890
881
(825)
862
501
(801)
896
502

FIG. 21

(3rd EMBODIMENT)